

FNR 340 – WILDLAND FIRE MGT. Cal Poly State University – December 2005

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COURSE DESCRIPTION:

Wildland fuels, fire weather, and fire danger ratings in chaparral, grassland, and forested areas. Advanced modelling of surface and crown fire behavior. Fire management strategies and implications. Policies and objectives of fire management organizations.

COURSE OBJECTIVES

Upon completion of this course, students should gain a basic understanding of:

- 1. Wildland fuel models
- 2. Fire behavior calculations and computer modeling
- 3. Smoke management
- 4. Prescribed fire and fuels management
- 5. Wildland-Urban Interface
- 6. Wildland fire policy

TEXTBOOK: FNR 340 handbook FNR 340 CD-Rom

INFORMATIVE WEB SITES:

- 1) Fire.org (Fire software downloads) http://fire.org/
- 2) RAWS USA Climate Maps http://www.wrcc.dri.edu/wraws/
- 3) California Weather Data & Fire Occurrence http://famweb.nwcg.gov/weatherfirecd/california.htm
- 4) Wildland Fire http://wildlandfire.com/
- 5) National Interagency Fire Center http://www.nifc.gov/
- 6) U.S. Fire & Aviation Management http://www.fs.fed.us/fire/
- 7) CDF Fire & Emergency Response http://www.fire.ca.gov/php/fire_er.php
- 8) Firewise (wildland/urban interface) http://www.firewise.org/



GRADING

The grade for this course will be based on the sum of 3 daily proficiency checks, class assignments, and a comprehensive final.

Source	Points	Total %	Grade standards
1. Three proficiency checks	100	33.3	A: 90-100%
2. Assignments	100	33.3	B: 80-89.99% C: 70-79.99%
3. Comprehensive final	100	33.3	D: 60-69.99%
Total	300	100	F: <60%

Instructor reserves right to give '+' or '-' to final course grade dependant on student's ending total points in the course and a subjective evaluation of individual student's attitude and class participation.

TENTATIVE SCHEDULE

<u>Date</u> Subject

Monday 12/12 Introduction & course logistics

Review of wildland fire behavior Introduction to fire prediction systems

Wildland fuel models

FireFamilyPlus fire climatology software BehavePlus fire prediction software

Tuesday 12/13 Proficiency check

BehavePlus fire prediction software FARSITE – Fire Area Simulator

Wednesday 12/14 Proficiency check

Crown fires

NEXUS crown fire hazard analysis software

Smoke Management

FOFEM - First Order Fire Effects Model

Thursday 12/15 Proficiency check

Prescribed fire

Healthy Forests Initiative Wildland/Urban Interface

National Fire Danger Rating System

Friday 12/16 Comprehensive final exam